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ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			SU, SARAH	
			ART UNIT	PAPER NUMBER
			2431	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/595,566	Applicant(s) HARTUNG ET AL.	
	Examiner Sarah Su	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-11,15-21,24 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-11, 15-21, 24, 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

1. Amendment B, received on 28 January 2011, has been entered into record. In this amendment, claims 1, 10, 20, and 29 have been amended.
2. Claims 1, 5-11, 15-21, 24, and 29 are presented for examination.

Response to Arguments

3. With regards to the objection to the specification, the applicant has submitted amendments, and the examiner hereby withdraws the objection.
4. Applicant's arguments filed 28 January 2011 have been fully considered but they are not persuasive.

It is argued by the applicant that a description of how the protected content is encrypted prior to decryption and a description of a handshaking process are not essential matter. The examiner respectfully disagrees. The examiner asserts that it is unclear how the user device obtains access to the first content encryption key that is used for decryption. Further, it is unclear how the user device obtains access to the key encryption key associated with the recipient device without having some other communication with the recipient device.

As to claim 1, it is argued by the applicant that Ginter and Inoue do not disclose where the restricting, blocking or deleting step; the second generating step; and the second communicating step are executed in sequence, clearly defining three distinct time intervals: before the expiry of the temporal restriction, until the expiry of the temporal restriction, and when the temporal restriction expires. The examiner

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respectfully disagrees. The examiner asserts that "before the expiry of the temporal restriction" and "until the expiry of the temporal restriction" describe the same period of time. Further, it is noted by the examiner that deleting the at least one defined usage right would then make it impossible to subsequently generate at least one received usage right that is a subset of the at least one defined usage right, since the generation would require knowledge of the defined usage right. Kawell discloses that when permission is given from one computer to another, the first computer's access is removed (page 3, lines 23-24).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 5-11, 15-21, 24, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 10, 20, and 29 have been amended to recite "wherein the restricting, blocking or deleting step, the second generation step, the second communication step, the second applying step, and the abolishing step are executed in sequence one after another," which is unclear. The examiner asserts that it is unclear how the recipient device is able to generate the received usage rights based on the defined usage rights if the defined usage rights have already been deleted.

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Dependent claim(s) 5-9, 11, 15-19, 21, and 24 do not appear to cure the deficiencies of the independent claims, and are therefore also rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 5-11, 15-21, 24, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginter et al. (US Patent 5,917,912 and Ginter hereinafter) in view of Inoue et al. (US 2003/0005135 A1 and Inoue hereinafter) and further in view of Kawell et al. (WO 00/20950 and Kawell hereinafter).

As to claims 1 and 29, Ginter discloses a system and method for secure transaction management and electronic rights protection, the system and method having:

obtaining the content at the user device from the protected content in accordance with the one or more first usage rights by decrypting the protected content by a first content encryption key in a first secure environment of the user device and by accessing the decrypted content in the first secure environment (col. 9, lines 19-24; col. 17, lines 42-51; col. 21, lines 62-67; col. 22, lines 1-12),

defining at least one usage right at the user device, the at least one defined usage right specifying one or more usage restrictions and/or one or more usage permissions of the content at a recipient device and the at least one defined usage right comprising a temporal restriction (col. 152, lines 45-52; col. 156, lines 18-26),

verifying that the at least one defined usage right is a subset of the one or more first usage rights (col. 156, lines 18-26),

generating at the user device integrity protection information for the at least one defined usage right (col. 215, lines 43-51; col. 216, lines 6-8),

encrypting the content with a content encryption key (col. 215, lines 2-5),

encrypting the content encryption key with a key encryption key associated with the recipient device and/or an operator of the recipient device (col. 128, lines 61-67; col. 129, lines 1-2),

communicating the encrypted content, the at least one defined usage right, the encrypted content encryption key, and the integrity protection information to the recipient device (col. 126, lines 48-56),

restricting the one or more first usage rights in consequence of the definition and/or the communication of the at least one defined usage right to the recipient device (col. 67, lines 25-29),

verifying at the recipient device the integrity of the at least one defined usage right based on the integrity protection information (col. 215, lines 43-51, 60-63),

decrypting at the recipient device the encrypted content encryption key with a decryption key corresponding to the key encryption key (col. 210, lines 18-22),

decrypting the encrypted content with the content encryption key in a secure environment of the recipient device (col. 210, lines 22-25),

applying the at least one defined usage right to the content in the secure environment (col. 53, lines 45-63),

using the content at the recipient device according to the applied at least one usage right (col. 53, lines 45-63);

generating by the recipient device at least one received usage right that is a subset of the at least one defined usage right (col. 156, lines 18-26),

Ginter fails to specifically disclose:

restricting or blocking or deleting the at least one defined usage right at the recipient device before the expiry of the temporal restriction, communicating an indication of the restricting or blocking or deleting from the recipient device to the user device, the indication comprising the at least one received usage right, without returning the encrypted content to the user device;

applying the at least one received usage right at the user device after the receipt of the indication from the recipient device until the expiry of the temporal restriction;

abolishing the restriction of the one or more first usage rights when the temporal restriction expires,

wherein the restricting, blocking or deleting step, the second generating step, the second communicating step, the second applying step, and the abolishing step are executed in sequence one after another.

Nonetheless, these features are well known in the art and would have been an obvious modification of the teachings disclosed by Ginter, as taught by Inoue.

Inoue discloses a system and method for license management and usage restriction, the system and method having:

restricting or blocking or deleting the at least one defined usage right at the recipient device before the expiry of the temporal restriction
(0113, lines 5-10),

communicating an indication of the restricting or blocking or deleting from the recipient device to the user device, the indication comprising the at least one received usage right, without returning the encrypted content to the user device (0170, lines 15-21);

abolishing the restriction of the one or more first usage rights when the temporal restriction expires (0100, lines 1-10; -0113, lines 5-10; 0124, lines 1-5, 14-19; 0170, lines 15-21).

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Given the teaching of Inoue, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter with the teachings of Inoue by abolishing a restriction when it expires. Inoue recites motivation by disclosing that temporarily imposing a restriction on a user and lifting the restriction at the expiration of a time period allows for a parent to restrict a child's usage during a particular time, for example, before exams (0100, lines 1-10). It is obvious that the teachings of Inoue would have improved the teachings of Ginter by temporarily restricting a user and abolishing the restriction after a certain time in order to allow a parent to restrict a child's usage of content without completely blocking it in order to allow for dynamic usage restriction implementation.

Ginter in view of Inoue fails to specifically disclose:

applying the at least one received usage right at the user device after the receipt of the indication from the recipient device until the expiry of the temporal restriction;

wherein the restricting, blocking or deleting step, the second generating step, the second communicating step, the second applying step, and the abolishing step are executed in sequence one after another.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Ginter in view of Inoue, as taught by Kawell. Kawell discloses a system and method for distributing access to a data item, the system and method having:

applying the at least one received usage right at the user device after the receipt of the indication from the recipient device until the expiry of the temporal restriction (page 3, lines 23-24);

wherein the restricting, blocking or deleting step, the second generating step, the second communicating step, the second applying step, and the abolishing step are executed in sequence one after another (page 3, lines 23-24).

Given the teaching of Kawell, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter in view of Inoue with the teachings of Kawell by applying a new right before expiration. Kawell recites motivation by disclosing that data may be lent by a library for a specific period of time in order to allow that the digital data may be transferred between multiple computers while ensuring a single instance of permission (page 1, lines 24-27), similar to a physical rental of a book. In the instance of a physical library, a book renter may return the book to the library prior to the expiration of the rental period, thus transferring back the permission to the library. It would have been obvious to apply the teachings of Kawell to the teachings of Ginter in view of Inoue by restricting a right before expiration of a restriction in order to permit the user to return a borrowed item early.

As to claim 10, Ginter discloses:

at least a transmission unit and a processing unit and further a receiving unit, wherein protected content exists being usage restricted by one or more first usage rights specifying one or more usage restrictions and/or one or more usage permissions of the protected content at the user device (col. 9, lines 19-24; col. 17, lines 42-51; col. 62, lines 15-17, 31-34),

the processing unit being adapted to obtain the content from the protected content in accordance with the one or more first usage rights by decrypting the protected content with a first content encryption key in a first secure environment of the user device and by accessing the decrypted content in the first secure environment (col. 9, lines 19-24; col. 17, lines 42-51; col. 21, lines 62-67; col. 22, lines 1-12), **to define at least one usage right specifying one or more usage restrictions and/or one or more usage permissions of the content at the recipient device, the at least one defined usage right comprising a temporal restriction** (col. 152, lines 45-52; col. 156, lines 18-26), **to verify that the at least one defined usage right is a subset of the one or more first usage rights** (col. 156, lines 18-26), **to generate integrity protection information for the at least one defined usage right** (col. 215, lines 43-51; col. 216, lines 6-8), **to encrypt the content with a content encryption key** (col. 215, lines 2-5), **to encrypt the content encryption key with a key encryption key associated with the recipient device and/or an operator of the recipient device** (col. 128, lines 61-67; col. 129, lines 1-2), **the transmission unit being adapted to send the encrypted content, the at least**

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one defined usage right, the encrypted content encryption key, and the integrity protection information to the recipient device (col. 126, lines 48-56), and the processing unit being adapted to restrict the one or more first usage rights in consequence of the definition and/or the communication of the at least one defined usage right to the recipient device (col. 67, lines 25-29);

wherein the indication comprises at least one received usage right that is a subset of the at least one defined usage right (col. 156, lines 18-26),

Ginter fails to specifically disclose:

the receiving unit is adapted to receive an indication of a restricting or a blocking or a deleting of the at least one defined usage rights from the recipient device before the expiry of the temporal restriction,

the processing unit is adapted to apply the at least one received usage right after the receipt of the indication from the recipient device until the expiry of the temporal restriction.

to abolish the restriction of the one or more first usage rights the when temporal restriction expires,

wherein the receiving unit receives the indication of the restricting or the blocking or the deleting of the at least one defined usage rights, the processing unit applies the at least one received usage right until the expiry of the temporal restriction and abolishes the restriction of the one or

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more first usage rights when temporal restriction expires in sequences one after another.

Nonetheless, these features are well known in the art and would have been an obvious modification of the teachings disclosed by Ginter, as taught by Inoue.

Inoue discloses:

the receiving unit is adapted to receive an indication of a restricting or a blocking or a deleting of the at least one defined usage rights from the recipient device before the expiry of the temporal restriction (0113, lines 5-10; 0170, lines 15-21),

to abolish the restriction of the one or more first usage rights the when temporal restriction expires (0100, lines 1-10; 0113, lines 5-10; 0124, lines 1-5, 14-19; 0170, lines 15-21).

Given the teaching of Inoue, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter with the teachings of Inoue by abolishing the restriction upon expiration. Please refer to the motivation recited above with respect to claims 1 and 29 as to why it is obvious to apply the teachings of Inoue to the teachings of Ginter.

Ginter in view of Inoue fails to specifically disclose:

the processing unit is adapted to apply the at least one received usage right after the receipt of the indication from the recipient device until the expiry of the temporal restriction;

wherein the receiving unit receives the indication of the restricting or the blocking or the deleting of the at least one defined usage rights, the processing unit applies the at least one received usage right until the expiry of the temporal restriction and abolishes the restriction of the one or more first usage rights when temporal restriction expires in sequences one after another.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Ginter in view of Inoue, as taught by Kawell.

Kawell discloses:

the processing unit is adapted to apply the at least one received usage right after the receipt of the indication from the recipient device until the expiry of the temporal restriction (page 3, lines 23-24);

wherein the receiving unit receives the indication of the restricting or the blocking or the deleting of the at least one defined usage rights, the processing unit applies the at least one received usage right until the expiry of the temporal restriction and abolishes the restriction of the one or more first usage rights when temporal restriction expires in sequences one after another (page 3, lines 23-24).

Given the teaching of Kawell, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter in view of Inoue with the teachings of Kawell by applying a new right before expiration. Please refer to the motivation recited above with respect to

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claims 1 and 29 as to why it is obvious to apply the teachings of Kawell to the teachings of Ginter and Inoue.

As to claims 5 and 15, Ginter discloses:

recognizing by the user device that the at least one received usage right relates to the at least one defined usage right (col. 55, lines 66-67).

Ginter fails to specifically disclose:

using the content at the user device according to the at least one first usage right even within the time upon the expiration of the temporal restriction.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Ginter, as taught by Inoue.

Inoue discloses:

using the content at the user device according to the at least one first usage right even within the time upon the expiration of the temporal restriction (0100, lines 1-10; 0124, lines 1-5, 14-19).

Given the teaching of Inoue, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter with the teachings of Inoue by accessing the data after expiration of a restriction at a user device. Please refer to the motivation recites above with respect to claim 1 as to why it is obvious to apply the teachings of Inoue to the teachings of Ginter.

As to claims 6 and 16, Ginter discloses:

wherein the step of communicating the at least one defined usage right to the recipient device is executed by communicating the at least one defined usage right from the user device to a rights server (col. 55, lines 39-43),

associating by the rights server the at least one defined usage right with authorization information indicating a rights issuer authorization for the at least one defined usage right to the recipient device (col. 55, lines 45-51),

communicating the at least one defined usage right and the authorization information from the rights server to the recipient device, and the recipient device verifies the rights issuer authorization based on the received authorization information (col. 14, lines 35-39; col. 55, lines 52-56).

As to claims 7 and 17, Ginter discloses:

communicating to a charging server an indication about the communication of the at least one defined usage right (col. 55, lines 57-61).

As to claims 8 and 18, Ginter discloses:

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wherein an input unit of the user device D receives at least one instruction from a user for defining the at least one usage right (col. 16, lines 17-20; col. 60, lines 31-36).

As to claims 9 and 19, Ginter discloses:

defining at least one further usage right for at least one further recipient device for controlling the usage of the content at the at least one further device (col. 16, lines 14-20).

As to claim 11, Ginter discloses:

the user device being adapted to load the protected content via a receiving unit and to store the protected content at a storage and/or to store pre-installed protected content at the storage (col. 58, lines 57-62; col. 62, lines 64-65).

As to claim 20, Ginter discloses:

at least a receiving unit and processing unit and further a transmission unit, wherein the receiving unit is adapted to receive the content being encrypted by a content encryption key, at least one defined usage right specifying one or more usage restrictions and/or usage permissions of the content and the at least one defined usage right comprising a temporal restriction, a content encryption key being

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encrypted by a key encryption key associated with the recipient device and/or an operator of the recipient device, and integrity protection information for the at least one defined usage right (col. 9, lines 19-24; col. 17, lines 42-51; col. 21, lines 62-67; col. 22, lines 1-12; col. 62, lines 15-17, 31-34),

the processing unit is adapted to verify the integrity of the at least one usage right based on the integrity protection information (col. 215, lines 43-51, 60-63), **to decrypt the encrypted content encryption key with a decryption key corresponding to the key encryption key** (col. 210, lines 18-22), **to decrypt the encrypted content with the content encryption key in a secure environment** (col. 210, lines 22-25), **to apply the at least one defined usage right to the content in the secure environment** (col. 53, lines 45-63), **and to use the content according to the applied at least one defined usage right** (col. 53, lines 45-63), **to generate at least one received usage right that is a subset of the at least one defined usage right for the indication** (col. 156, lines 18-26).

Ginter fails to specifically disclose:

to restrict or block or delete the at least one defined usage right before the temporal restriction expires,

the transmission unit is adapted to send the indication comprising the at least one received usage right to the user device,

wherein the recipient device restricts or blocks or deletes the at least one defined usage rights, generates the indication of the restricting or the blocking or the deleting, generates the at least one received usage right that is a subset of the at least one defined usage right for the indication, and sends the indication comprising the at least one received usage right to the user device in sequence one after another.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Ginter, as taught by Inoue.

Inoue discloses:

to restrict or block or delete the at least one defined usage right before the temporal restriction expires (0113, lines 5-10),
the transmission unit is adapted to send the indication comprising the at least one received usage right to the user device (0113, lines 5-10; 0170, lines 15-21).

Given the teaching of Inoue, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter with the teachings of Inoue by restricting a right before expiration. Please refer to the motivation recited above with respect to claims 1 and 29 as to why it is obvious to apply the teachings of Inoue to the teachings of Ginter.

Ginter in view of Inoue fails to specifically disclose:

wherein the recipient device restricts or blocks or deletes the at least one defined usage rights, generates the indication of the restricting or the blocking or the deleting, generates the at least one received usage right that is a subset of the at least one defined usage right for the indication, and sends the indication comprising the at least one received usage right to the user device in sequence one after another.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the teachings disclosed by Ginter in view of Inoue, as taught by Kawell.

Kawell discloses:

wherein the recipient device restricts or blocks or deletes the at least one defined usage rights, generates the indication of the restricting or the blocking or the deleting, generates the at least one received usage right that is a subset of the at least one defined usage right for the indication, and sends the indication comprising the at least one received usage right to the user device in sequence one after another (page 3, lines 23-24).

Given the teaching of Kawell, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying the teachings of Ginter in view of Inoue with the teachings of Kawell by applying a new right before expiration. Please refer to the motivation recited above with respect to claims 1 and 29 as to why it is obvious to apply the teachings of Kawell to the teachings of Ginter and Inoue.

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As to claim 21, Ginter discloses:

wherein the processing unit is adapted to generate an alert if the integrity of the at least one defined usage right is violated and to initiate an indication of the alert at an output unit (col. 237, lines 33-37).

As to claim 24, Ginter discloses:

wherein the receiving unit is adapted to receive the at least one defined usage right and associated authorization information indicating a rights issuer authorization from a rights server and the processing unit is adapted to verify the rights issuer authorization based on the received authorization information (col. 14, lines 35-39; col. 55, lines 45-56).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Su whose telephone number is (571) 270-3835. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Su/
Examiner, Art Unit 2431

/NATHAN FLYNN/
Supervisory Patent Examiner, Art Unit 2468